



Quarterly Market Review
Second Quarter 2022

# **Quarterly Market Review**

### Second Quarter 2022



This report features world capital market performance and a timeline of events for the past quarter. It begins with a global overview, then features the returns of stock and bond asset classes in the US and international markets.

The report also illustrates the impact of globally diversified portfolios and features a quarterly topic.

#### Overview:

Market Summary

World Stock Market Performance

**US Stocks** 

International Developed Stocks

**Emerging Markets Stocks** 

Country Returns

Real Estate Investment Trusts (REITs)

Commodities

**Fixed Income** 

Global Fixed Income

Impact of Diversification

Quarterly Topic: Three Crucial Lessons for Weathering the Stock Market's Storm

**Appendix** 

# **Quarterly Market Summary**



01-1-1

Index returns

	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
Q2 2022		STC	OCKS		ВО	NDS
	-16.70%	-14.66%	-11.45%	-17.22%	-4.69%	-4.01%
Since Jan. 2001						
Average Quarterly Return	2.2%	1.4%	2.6%	2.3%	1.0%	0.9%
Best	22.0%	25.9%	34.7%	32.3%	4.6%	4.6%
Quarter	2020 Q2	2009 Q2	2009 Q2	2009 Q3	2001 Q3	2008 Q4
Worst	-22.8%	-23.3%	-27.6%	-36.1%	-5.9%	-4.1%
Quarter	2008 Q4	2020 Q1	2008 Q4	2008 Q4	2022 Q1	2022 Q1

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

Market segment (index representation) as follows: US Stock Market (Russell 3000 Index), International Developed Stocks (MSCI World ex USA Index [net dividends]), Emerging Markets (MSCI Emerging Markets Index [net dividends]), Global Real Estate (S&P Global REIT Index [net dividends]), US Bond Market (Bloomberg US Aggregate Bond Index), and Global Bond Market ex US (Bloomberg Global Aggregate ex-USD Bond Index [net dividends]), S&P data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2022, all rights reserved. Bloomberg data provided by Bloomberg.

## **Long-Term Market Summary**



Index returns as of June 30, 2022

	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US		
1 Year		sто	скѕ		ВО	BONDS		
	-13.87%	-16.76%	-25.28%	-10.61%	-10.29%	-7.75%		
5 Years								
	10.60%	2.66%	2.18%	2.79%	0.88%	1.30%		
10 Years								
	12.57%	5.37%	3.06%	5.15%	1.54%	2.66%		

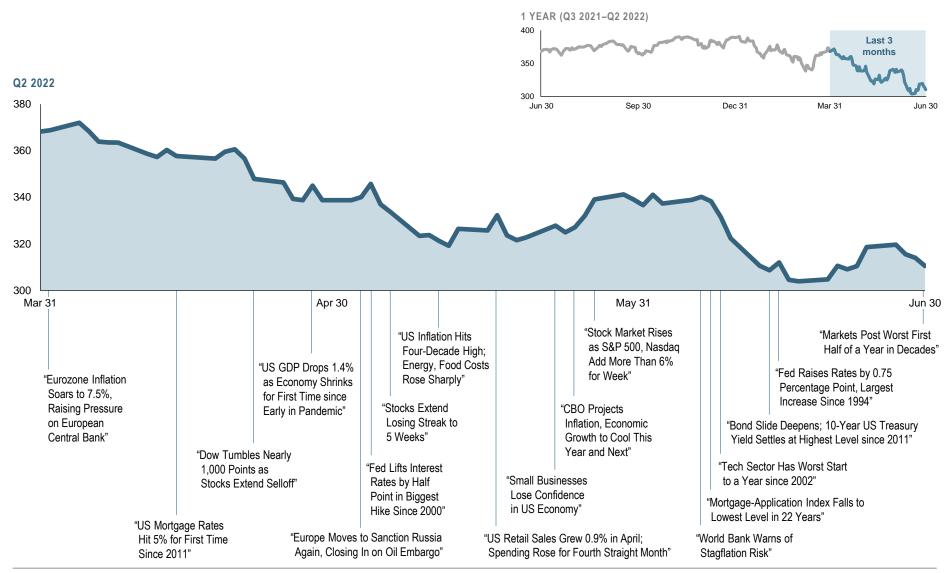
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

Market segment (index representation) as follows: US Stock Market (Russell 3000 Index), International Developed Stocks (MSCI World ex USA Index [net dividends]), Emerging Markets (MSCI Emerging Markets Index [net dividends]), Global Real Estate (S&P Global REIT Index [net dividends]), US Bond Market (Bloomberg US Aggregate Bond Index), and Global Bond Market ex US (Bloomberg Global Aggregate ex-USD Bond Index [hedged to USD]). S&P data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2022, all rights reserved. Bloomberg data provided by Bloomberg.

### World Stock Market Performance



MSCI All Country World Index with selected headlines from Q2 2022

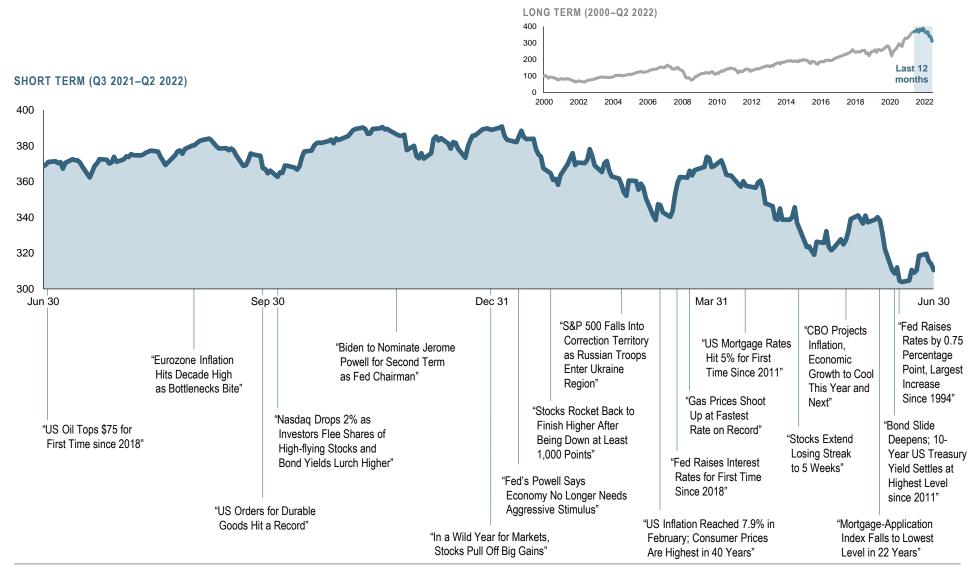


These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

# World Stock Market Performance



MSCI All Country World Index with selected headlines from past 12 months



These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

### **US Stocks**

### Second quarter 2022 index returns



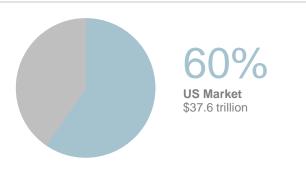
The US equity market posted negative returns for the quarter and underperformed both non-US developed and emerging markets.

Value outperformed growth.

Small caps underperformed large caps.

REIT indices underperformed equity market indices.

#### World Market Capitalization—US



#### Ranked Returns (%)

Large Value		-12.21
Small Value	-15.28	
Large Cap	-16.67	
Marketwide	-16.70	
Small Cap	-17.20	
Small Growth	-19.25	
Large Growth	-20.92	

#### **Period Returns (%)**

\* Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Large Value	-12.21	-12.86	-6.82	6.87	7.17	10.50
Small Value	-15.28	-17.31	-16.28	6.18	4.89	9.05
Large Cap	-16.67	-20.94	-13.04	10.17	11.00	12.82
Marketwide	-16.70	-21.10	-13.87	9.77	10.60	12.57
Small Cap	-17.20	-23.43	-25.20	4.21	5.17	9.35
Small Growth	-19.25	-29.45	-33.43	1.40	4.80	9.30
Large Growth	-20.92	-28.07	-18.77	12.58	14.29	14.80

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

Market segment (index representation) as follows: Marketwide (Russell 3000 Index), Large Cap (Russell 1000 Index), Large Value (Russell 1000 Value Index), Large Growth (Russell 1000 Growth Index), Small Value (Russell 2000 Value Index), and Small Growth (Russell 2000 Growth Index). World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. Russell 3000 Index is used as the proxy for the US market. Dow Jones US Select REIT Index used as proxy for the US REIT market. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2022, all rights reserved.

## International Developed Stocks



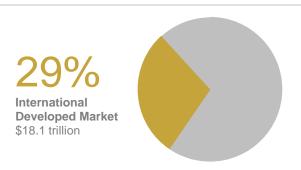
### Second quarter 2022 index returns

Developed markets outside of the US posted negative returns for the quarter, outperforming the US and underperforming emerging markets.

Value outperformed growth.

Small caps underperformed large caps.

#### World Market Capitalization—International Developed



#### Ranked Returns (%)



#### Period Returns (%)

\* Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Value	-12.36	-11.00	-10.28	1.13	1.26	4.42
Large Cap	-14.66	-18.76	-16.76	1.70	2.66	5.37
Growth	-17.25	-26.33	-23.37	1.55	3.61	6.04
Small Cap	-17.94	-23.87	-23.02	1.97	2.16	6.70

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

Market segment (index representation) as follows: Large Cap (MSCI World ex USA Index), Small Cap (MSCI World ex USA Small Cap Index), Value (MSCI World ex USA Value Index), and Growth (MSCI World ex USA Growth Index). All index returns are net of withholding tax on dividends. World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. MSCI World ex USA IMI Index is used as the proxy for the International Developed market. MSCI data © MSCI 2022, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

# **Emerging Markets Stocks**

### Second quarter 2022 index returns

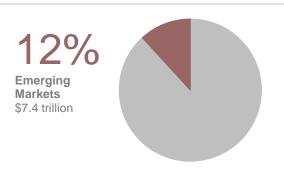


Emerging markets posted negative returns for the quarter, outperforming the US and non-US developed markets.

Value outperformed growth.

Small caps underperformed large caps.

#### **World Market Capitalization—Emerging Markets**



#### Ranked Returns (%)



#### Period Returns (%)

\* Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Value	-10.83	-13.89	-18.59	-0.97	1.25	1.46
Large Cap	-11.45	-17.63	-25.28	0.57	2.18	3.06
Growth	-12.04	-21.07	-31.18	1.88	2.92	4.54
Small Cap	-16.41	-20.03	-20.72	5.78	3.48	4.31

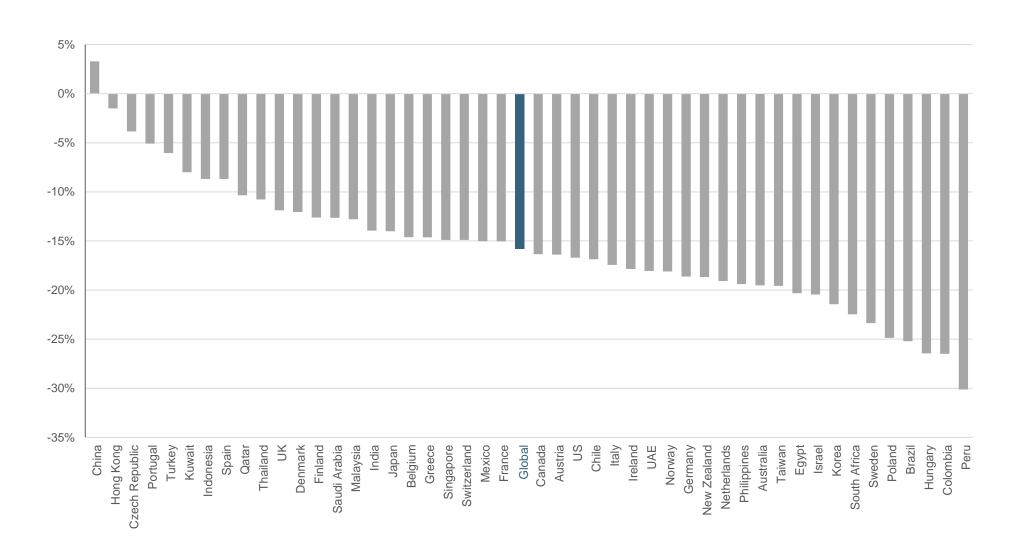
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

Market segment (index representation) as follows: Large Cap (MSCI Emerging Markets Index), Small Cap (MSCI Emerging Markets Small Cap Index), Value (MSCI Emerging Markets Value Index), and Growth (MSCI Emerging Markets Growth Index). All index returns are net of withholding tax on dividends. World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index used as the proxy for the emerging market portion of the market. MSCI data © MSCI 2022, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

# Country Returns



Second quarter 2022 index returns



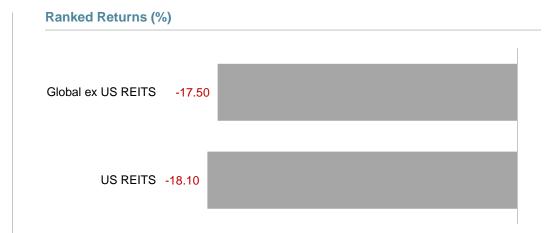
#### Past performance is no guarantee of future results.

# Real Estate Investment Trusts (REITs)

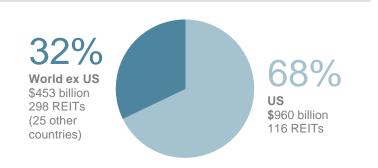


Second quarter 2022 index returns

US real estate investment trusts underperformed non-US REITs during the quarter.



#### **Total Value of REIT Stocks**



#### **Period Returns (%)**

*	Ann	uali	ized
---	-----	------	------

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Global ex US REITS	-17.50	-19.93	-17.73	-4.38	0.20	3.47
US REITS	-18.10	-21.14	-6.41	2.54	4.28	6.61

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

Number of REIT stocks and total value based on the two indices. All index returns are net of withholding tax on dividends. Total value of REIT stocks represented by Dow Jones US Select REIT Index and the S&P Global ex US REIT Index. Dow Jones US Select REIT Index used as proxy for the US market, and S&P Global ex US REIT Index used as proxy for the World ex US market. Dow Jones and S&P data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

### Commodities

### Second quarter 2022 index returns



The Bloomberg Commodity Index Total Return returned -5.66% for the second quarter of 2022.

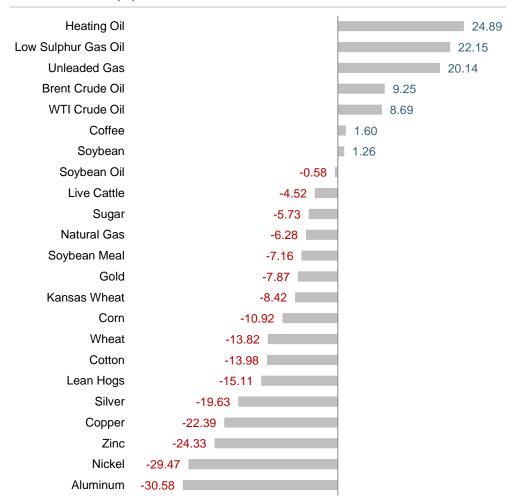
Aluminum and Nickel were the worst performers, returning -30.58% and -29.47% during the quarter, respectively. Heating Oil and Low Sulphur Gas Oil were the best performers, returning +24.89% and +22.15% during the quarter, respectively.

#### **Period Returns (%)**

\* Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Commodities	-5.66	18.44	24.27	14.34	8.39	-0.82

#### Ranked Returns (%)



### **Fixed Income**

### Second quarter 2022 index returns



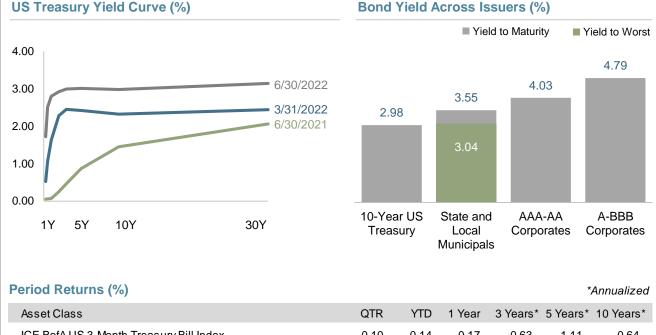
Interest rates increased across all maturities in the US Treasury market for the quarter.

The yield on the 5-Year US Treasury Note increased 59 basis points (bps) to 3.01%. The yield on the 10-Year US Treasury Note increased 66 bps to 2.98%. The yield on the 30-Year US Treasury Bond increased 70 bps to 3.14%.

On the short end of the yield curve, the 1-Month US Treasury Bill yield increased 111 bps to 1.28%, while the 1-Year US Treasury Bill yield increased 117 bps to 2.80%. The yield on the 2-Year US Treasury Note increased 64 bps to 2.92%.

In terms of total returns, short-term corporate bonds returned -1.94% and intermediate-term corporate bonds returned -3.92%.<sup>1</sup>

The total return for short-term municipal bonds was +0.08% and -1.30% for intermediate-term municipal bonds. Within the municipal fixed income market, general obligation bonds outperformed revenue bonds, returning -2.51% vs. -3.37%, respectively.<sup>2</sup>



Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
ICE BofA US 3-Month Treasury Bill Index	0.10	0.14	0.17	0.63	1.11	0.64
ICE BofA 1-Year US Treasury Note Index	-0.48	-1.27	-1.44	0.53	1.10	0.73
FTSE World Government Bond Index 1-5 Years (hedged to USD)	-0.95	-3.30	-3.79	0.04	1.08	1.22
Bloomberg Municipal Bond Index	-2.94	-8.98	-8.57	-0.18	1.51	2.38
FTSE World Government Bond Index 1-5 Years	-4.28	-7.69	-9.90	-2.02	-0.57	-1.05
Bloomberg U.S. Aggregate Bond Index	-4.69	-10.35	-10.29	-0.93	0.88	1.54
Bloomberg U.S. TIPS Index	-6.08	-8.92	-5.14	3.04	3.21	1.73
Bloomberg U.S. High Yield Corporate Bond Index	-9.83	-14.19	-12.81	0.21	2.10	4.47
Bloomberg U.S. Government Bond Index Long	-11.89	-21.20	-18.42	-2.94	0.50	1.65

<sup>1.</sup> Bloomberg US Corporate Bond Index.

<sup>2.</sup> Bloomberg Municipal Bond Index.

One basis point (bps) equals 0.01%. Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Yield curve data from Federal Reserve. State and local bonds, and the Yield to Worst are from the S&P National AMT-Free Municipal Bond Index. AAA-AA Corporates represent the ICE BofA US Corporates, AA-AAA rated. A-BBB Corporates represent the ICE BofA Corporates, BBB-A rated. Bloomberg data provided by Bloomberg. US long-term bonds, bills, inflation, and fixed income factor data © Stocks, Bonds, Bills, and Inflation (SBBI) Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield). FTSE fixed income indices © 2022 FTSE Fixed Income LLC, all rights reserved. ICE BofA index data © 2022 ICE Data Indices, LLC. S&P data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

### Global Fixed Income

### Second quarter 2022 yield curves



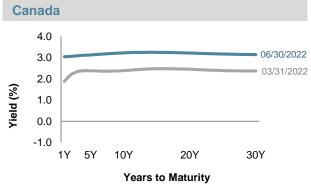
Interest rates generally increased across maturities within global developed markets for the quarter.

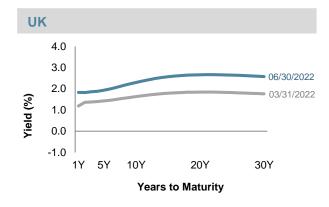
Realized term premiums were negative in global developed markets.

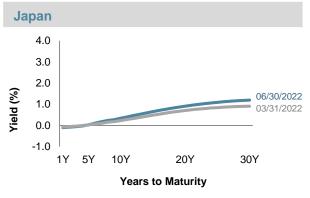
In Germany, short-term nominal interest rates increased to become positive during the quarter. In Japan, short-term nominal interest rates remained negative.

#### 











#### Changes in Yields (bps) since 3/31/2022

	1Y	5Y	10Y	20Y	30Y
US	115.5	55.1	66.3	76.0	62.3
UK	64.5	50.6	66.7	81.9	81.6
Germany	83.1	68.9	84.9	103.8	95.7
Japan	-3.0	0.2	11.0	20.4	28.2
Canada	116.2	74.7	83.5	76.4	77.0
Australia	146.4	78.0	81.7	68.5	61.2

## Impact of Diversification





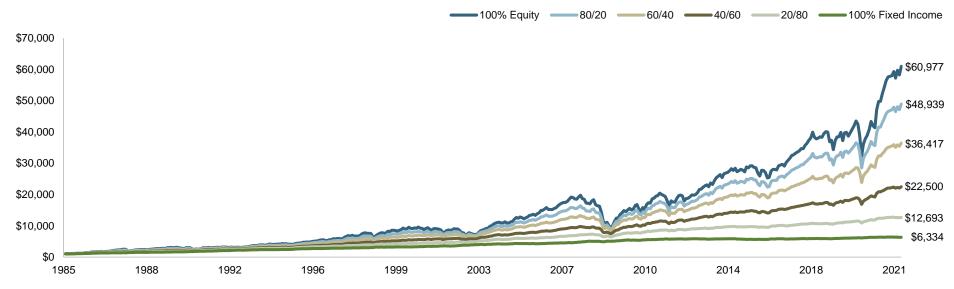
These indices illustrate the performance of different global stock/bond mixes and highlight the benefits of diversification. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

#### Period Returns (%)

\* Annualized

Dimensional Core Plus Wealth Index Model	3 Month	1 Year	3 Years*	5 Years*	10 Years*	10-Year STDEV <sup>1</sup>
100% Equity	6.61	22.63	21.12	14.57	13.24	14.11
80/20	5.30	17.70	18.49	12.90	11.94	11.76
60/40	3.86	12.63	15.37	10.82	9.99	9.07
40/60	2.22	7.79	10.82	7.75	7.28	6.13
20/80	0.55	2.10	6.40	4.89	4.05	3.71
100% Fixed Income	-0.51	-0.93	2.20	1.98	0.97	1.73

#### Growth of Wealth: The Relationship Between Risk and Return



1. STDEV (standard deviation) is a measure of the variation or dispersion of a set of data points. Standard deviations are often used to quantify the historical return volatility of a security or portfolio.

Diversification does not eliminate the risk of market loss. For illustrative purposes only. Past performance is no guarantee of future results. The performance reflects the growth of a hypothetical \$1,000. Assumes all models have been rebalanced monthly. See appendix for allocation information. All performance results are based on performance of indexes with model/back-tested asset allocations; the performance was achieved with the benefit of hindsight; it does not represent actual investment strategies. The index models are unmanaged and the model's performance does not reflect advisory fees or other expenses associated with the management of an actual portfolio. In particular, Model performance may not reflect the impact that economic and market factors may have had on the advisor's decision making if the advisor were actually managing client money. The models are not recommendations for an actual allocation. Indices are not available for direct investment. Backtested performance results assume the reinvestment of dividends and capital gains. Sources: Dimensional Fund Advisors LP for Dimensional Indices. Copyright 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.





Second Quarter 2022

Marlena Lee, PhD Global Head of Investment Solutions

Investors can always expect uncertainty. While volatile periods like the one we're experiencing now can be intense, investors who learn to embrace uncertainty may often triumph in the long run. Reacting to down markets is a good way to derail progress made toward reaching your financial goals.

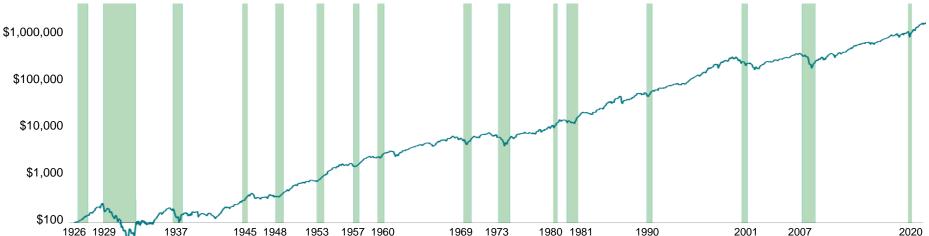
Here are three lessons to keep in mind during periods of volatility that can help you stick to your well-built plan. And if you don't have a plan, there's a suggestion for that too.

#### 1. A recession is not a reason to sell

Are we headed into a recession? A century of economic cycles teaches us we may well be in one before economists make that call.

But one of the best predictors of the economy is the stock market itself. Markets tend to fall in advance of recessions and start climbing earlier than the economy does. As the below shows, returns have often been positive while in a recession.





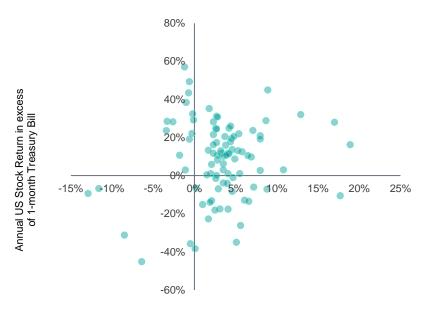
#### Past performance is no guarantee of future results.

In US dollars. Recessions shaded in green. Stock returns represented by Fama/French Total US Market Research Index, provided by Ken French and available at mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\_library.html. This value-weighed US market index is constructed every month, using all issues listed on the NYSE, AMEX, or Nasdaq with available outstanding shares and valid prices for that month and the month before. Exclusions: American depositary receipts. Sources: CRSP for value-weighted US market return. Rebalancing: Monthly. Dividends: Reinvested in the paying company until the portfolio is rebalanced. Growth of wealth shows the growth of a hypothetical investment of \$100 in the securities in the Fama/French US Total Market Research Index from July 1926 through December 2021.

# Three Crucial Lessons for Weathering the Stock Market's Storm

(continued from page 16)

All the dots in the upper left quadrant in the chart below are years where the US economy contracted but US stocks still outperformed less-risky Treasury bills. It's a great illustration of the forward-looking nature of markets. If you're worried, other investors are too, and that uncertainty is reflected in stock prices.



Annual Real GDP Growth

#### Past performance is no guarantee of future results.

Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. In USD. Annual GDP growth rates obtained from the US Bureau of Economic Analysis. GDP growth numbers are adjusted to 2012 USD terms to remove the effects of inflation. Data provided by Fama/French. Eugene Fama and Ken French are members of the Board of Directors of the general partner of and provide consulting services to, Dimensional Fund Advisors LP. Please see "Appendix Descriptions" for a description of the Fama/French index data. Results shown during periods prior to each index's index inception date do not represent actual returns of the respective index. Other periods selected may have different results, including losses. Backtested index performance is hypothetical and is provided for informational purposes only to indicate historical performance had the index been calculated over the relevant time periods. Backtested performance results assume the reinvestment of dividends and capital gains.

Whether accompanied by recessions or not, market downturns can be unsettling. But over the past century, US stocks have averaged positive returns over one-year, three-year, and five-year periods following a steep decline.

A year after the S&P 500 crossed into bear market territory (a 20% fall from the market's previous peak), it rebounded by about 20% on average. And after five years, the S&P 500 averaged returns over 70%.<sup>1</sup>

#### Fama/French Total US Market Research Index Returns

July 1, 1926-December 31, 2021



#### Past performance is no guarantee of future results.

Market declines or downturns are defined as periods in which the cumulative return from a peak is

-10%, -20%, or -30% or lower. Returns are calculated for the 1-, 3-, and 5-year look-ahead periods beginning the day after the respective downturn thresholds of -10%, -20%, or -30% are exceeded. The bar chart shows the average returns for the 1-, 3-, and 5-year periods following the 10%, 20%, and 30% thresholds. For the 10% threshold, there are 29 observations for 1-year look-ahead, 28 observations for 3-year look-ahead, and 27 observations for 5-year look-ahead. For the 20% threshold, there are 15 observations for 1-year look-ahead, 14 observations for 3-year look-ahead, and 13 observations for 5-year look-ahead. For the 30% threshold, there are 7 observations for 1-year look-ahead, 6 observations for 3-year look-ahead, and 6 observations for 5-year look-ahead. Peak is a new all-time high prior to a downturn. Data provided by Fama/French and available at mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\_library.html. Fama/French Total US Market Research Index: 1926–present: Fama/French Total US Market Research Factor and One-Month US Treasury Bills. Source: Ken French website.

# Three Crucial Lessons for Weathering the Stock Market's Storm

(continued from page 17)

We believe that staying invested puts you in the best position to capture the recovery. If you take risk out of your portfolio, it should be a strategic, not tactical, choice. We believe the only good reason to sell out of a stock portfolio now—so long as it's diversified and low-cost—is because you learned something about your risk tolerance or your investment goals have changed.

#### 2. Time the market at your peril

When stocks have declined, it might be tempting to sell to stem further losses. You might think, "I'll sit out until things get a bit better." But by the time markets are less volatile, you'll have often missed part of the recovery. Yes, it stings to watch your portfolio shrink, but imagine how you'll feel when it's stuck while the market rebounds.

Big return days are hard to predict, and you really don't want to miss them. If you invested \$1,000 in the S&P 500 continuously from the beginning of 1990 through the end of 2020, you would have \$20,451. If you missed the single best day, you'd only have \$18,329—and only \$12,917 if you missed the best five days.<sup>2</sup>

History shows the stock market tends to rebound quickly. The same can't be said for individual stocks or even entire sectors. (How many railroad stocks do you own?) So, while investing means taking on some risk for expected reward,

#### 3. It may be a good time to reassess your portfolio and your plan

We saw many fads crop up through the pandemic, from baking to puppy adoption. Did you experiment with one of the pandemic investment fads—FAANGs or meme stocks or dogecoin? If so, it may be time to put those fads in the rearview.

Do you know the names of all the stocks you own? Then you probably own too few. How much of your portfolio sits outside the US? Because about half the global market is comprised of foreign stocks. If you only invest in the S&P 500, you're missing half of the investment opportunity set. A market-cap-weighted global portfolio is a better starting point than chasing segments of the market that have outperformed in the past few years.

And if you want to outperform the market, allow decades of academic research to light the way. Portfolios focused on small caps, value stocks, and more profitable companies have had higher returns over the long run. The portfolio I use is invested across more than 10,000 global equities in over 40 countries.

Beyond a well-designed portfolio, one of the best ways to deal with volatile markets and disappointing returns is to have planned for them. A financial advisor can help you develop a plan that bakes in the chances you'll experience some market lows. And they can help you find the confidence to weather the current storm and get to the other side.

A sound approach to investing—through a plan, a well-designed portfolio, and an advisor—is the ultimate self-care during these rough markets. Your future self will thank you.

investors about 2 mitigate risks where they can a diversification is a top risks place. Indice This piece first appeared in Market Watch with the title "Follow these 3 crucial miligation floor along in which investing the stock market's storment of income and no transaction costs or taxes. The analysis is for illustrative purposes only and is not indicative of any investment. S&P data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Indices are not available for direct investment.

Diversification neither assures a profit nor guarantees against loss in a declining market. Past performance is not a guarantee of future results.

The information in this material is intended for the recipient's background information and use only. It is provided in good faith and without any warranty or representation as to accuracy or completeness. Information and opinions presented in this material have been obtained or derived from sources believed by Dimensional to be reliable and Dimensional has reasonable grounds to believe that all factual information herein is true as at the date of this material. It does not constitute investment advice, recommendation, or an offer of any services or products for sale and is not intended to provide a sufficient basis on which to make an investment decision. Before acting on any information in this document, you should consider whether it is suitable for your particular circumstances and, if appropriate, seek professional advice. It is the responsibility of any persons wishing to make a purchase to inform themselves of and observe all applicable laws and regulations. Unauthorized reproduction or transmitting of this material is strictly prohibited. Dimensional accepts no responsibility for loss arising from the use of the information contained herein.

This material is not directed at any person in any jurisdiction where the availability of this material is prohibited or would subject Dimensional or its products or services to any registration, licensing or other such legal requirements within the jurisdiction.

Investments involve risks. The investment return and principal value of an investment may fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original value. Past performance is not a guarantee of future results. There is no guarantee strategies will be successful.

Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission. Investment products: • Not FDIC Insured • Not Bank Guaranteed • May Lose Value

Dimensional Fund Advisors does not have any bank affiliates.